



IFW

Confirmation No.: 5467

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Robert M'Closkey et al.	Examiner:	Not Yet Assigned
Serial No.:	10/603,557	Group Art Unit:	2816
Filed:	June 25, 2003	Docket:	PD-02-0744
Title:	INTEGRATED LOW POWER DIGITAL GYRO CONTROL ELECTRONICS		

**CERTIFICATE OF MAILING OR TRANSMISSION UNDER 37 CFR 1.8**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on May 28, 2004.

By: Victor G. Cooper

Name: Victor G. Cooper

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

We are transmitting herewith the attached:

- ☒ Transmittal sheet, in duplicate, containing a Certificate of Mailing under 37 CFR 1.8.
- ☒ Information Disclosure Statement and Form PTO-1449.
- ☒ Cited Reference(s).
- ☒ Return postcard.

**Please consider this a PETITION FOR EXTENSION OF TIME for a sufficient number of months to enter these papers, if appropriate.**

**Please charge all fees to Deposit Account No. 50-0494 of Gates & Cooper LLP. A duplicate of this paper is enclosed.**

**Customer Number 22462**  
**GATES & COOPER LLP**  
Howard Hughes Center  
6701 Center Drive West, Suite 1050  
Los Angeles, CA 90045  
(310) 641-8797

By: Victor G. Cooper

Name: Victor G. Cooper

Reg. No.: 39,641

VGC/jml

(PTO TRANSMITTAL - GENERAL)



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INFORMATION DISCLOSURE STATEMENT (37 C.F.R. §1.97(b))

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

With regard to the above-identified application, the items of information listed on the enclosed Form 1449 are brought to the attention of the Examiner.

This statement should be considered because it is submitted before the mailing date of a first Office Action on-the-merits. Accordingly, no fee is due for consideration of the items listed on the enclosed Form 1449.

In accordance with 37 C.F.R. §1.98(a)(2), a copy of each document or other information listed on the enclosed Form 1449 is provided.

No representation is made that a reference is "prior art" within the meaning of 35 U.S.C. §§ 102 and 103 and Applicants reserve the right, pursuant to 37 C.F.R. § 1.131 or otherwise, to

establish that the reference(s) are not "prior art". Moreover, Applicants do not represent that a reference has been thoroughly reviewed or that any relevance of any portion of a reference is intended.

Consideration of the items listed is respectfully requested. Pursuant to the provisions of M.P.E.P. 609, it is requested that the Examiner return a copy of the attached Form 1449, marked as being considered and initialed by the Examiner, to the undersigned with the next official communication.

Please direct any response or inquiry to the below-signed attorney at (310) 641-8797.

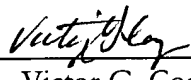
Respectfully submitted,

GATES & COOPER LLP  
Attorneys for Applicant(s)

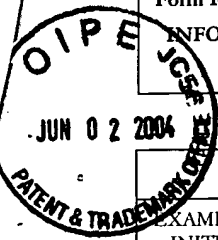
Howard Hughes Center  
6701 Center Drive West, Suite 1050  
Los Angeles, California 90045  
(310) 641-8797

Date: May 28, 2004

VGC/jml

By:   
Victor G. Cooper  
Reg. No.: 39,641

<b>Form 1449*</b> <b>INFORMATION DISCLOSURE STATEMENT</b> <b>IN AN APPLICATION</b>	Docket Number: PD-02-0744	Application Number: 10/603,557
	Applicant: Robert M'Closkey et al.	
	Filing Date: June 25, 2003	Group Art Unit: 2816



## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	2003/0150267	8/14/03	Challoner et al.			
	392,650	11/13/1888	Watrous			
	5,203,208	04/20/93	Bernstein			
	5,226,321	07/13/93	Varnham et al.			
	5,646,346	07/08/97	Okada			
	5,665,915	09/09/97	Kobayashi et al.			
	5,783,749	07/21/98	Lee et al.			
	5,894,090	04/13/99	Tang et al.			
	5,905,202	05/18/99	Kubena et al.			
	5,920,012	07/06/99	Pinson			
	6,009,751	01/04/00	Ljung			
	6,044,705	04/04/00	Neukermans et al.			
	6,164,134	12/26/00	Cargille			
	6,282,958	09/04/01	Fell et al.			
	6,289,733 B1	09/18/01	Challoner et al.			
	6,367,786	04//09/02	Gutierrez et al.			
	6,515,278	02/04/03	Wine et al.			
	6,629,460	10/07/03	Challoner			

## FOREIGN PATENTS

	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	WO 96/38710	12/05/96	PCT				
	WO 98/15799	04/16/98	PCT				
	DE 44 42 033 A1	05/30/96	Germany				

## NON-PATENT DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	N. Barbour et al., "Micromechanical Silicon Instrument and Systems Development at Draper Laboratory," AIAA Guidance Navigation and Control Conference, American Institute of Aeronautics and Astronautics, San Diego, CA, July 29-31, 1996, Paper No. 96-3709, pp. 1-7
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EXAMINER:	DATE CONSIDERED:
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.	

<b>Form 1449*</b>	Docket Number: PD-02-0744	Application Number: 10/603,557
<b>INFORMATION DISCLOSURE STATEMENT</b>	Applicant: Robert M'Closkey et al.	
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		T. Fujita et al., "Disk-shaped bulk micromachined gyroscope with vacuum sealing," <u>Sensors and Actuators A: Physical</u> , Volume 82, Issues 1-3, 15 May 2000, pp. 198-204.
		Grayver, E., et al., "Automatic Gain Control ASIC for MEMS Gyro Applications." Proceedings of the American Control Conference, Vol. 2, pp. 1219-1222, June 2001.
		J.D. Johnson et al., "Surface Micromachined Angular Rate Sensor," A1995 SAE Conference, Paper No. 950538, pp. 77-83
		M'Closkey, R.T., et al., "Analysis of a Microsensor Automatic Gain Control Loop", Proceedings of the American Control Conference, San Diego, California, Vol. 5, pp. 3307-3311, 1999.
		M'Closkey, R.T., et al., "Mode Localization Induced by a Nonlinear Control Loop", Nonlinear Dynamics, Vol. 25, No. 1, pp. 221-236, 2001.
		M'Closkey, R.T., et al., "System Identification of a MEMS Gyroscope", J. of Dynamic Systems, Measurement, and Control, Vol. 123, pp. 201, June 2001.
		M.W. Putty et al., "A Micromachined Vibrating Ring Gyroscope," Solid State Sensor and Actuator Workshop, Transducer Research Foundation, Hilton Head, 1994, pp. 213-220
		Tang, T.K., et al., "Silicon Bulk Micromachined Vibratory Gyroscope", Solid State Sensor and Actuator Workshop, Hilton Head South Carolina, pp. 288-293, 1996.
		Tang, T.K., et al., "Silicon bulk micromachined vibratory gyroscope for microspacecraft", Proceedings of the SPIE - The International Society for Optical Engineering, Denver Colorado, Vol. 2810, pp.101-115, 1996.
		Tang, T.K., et al., "A PACKAGED SILICON MEMS VIBRATORY GYROSCOPE FOR MICROSPACECRAFT" Proceedings IEEE, The Tenth Annual International Workshop on Micro Electro Mechanical Systems, Nagoya, Japan, pp. 500-505, 1997.
		D. Wright et al., "The HRG Applied to a Satellite Attitude Reference System," Guidance and Control, American Astronautical Society, Advances in Astronautical Sciences, 1994, 86:1-13

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